



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

June 11, 2015

Mr. Mark Davis, Plant Manager
SEMASS Partnership
141 Cranberry Highway
West Wareham, MA 02576-1504

RE: ROCHESTER
Transmittal No.: X265002
Application No.: SE-15-013
Class: OP
FMF No.: 131580
AIR QUALITY PLAN APPROVAL

Dear Mr. Davis:

The Massachusetts Department of Environmental Protection ("MassDEP"), Bureau of Air and Waste, has reviewed your Non-major Comprehensive Plan Approval Application ("Application") listed above. This Application concerns the modification of Administrative Amendment No. SE-13-026 dated June 28, 2013. The Application bears the seal and signature of Eric Pearson, Massachusetts Registered Professional Engineer number 39741.

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 "Air Pollution Control," regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-J, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP's review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner / operator ("Permittee") must comply in order for the Facility to be operated in compliance with this Plan Approval.

1. DESCRIPTION OF FACILITY AND APPLICATION

The SEMASS Resource Recovery Facility produces energy from waste. The facility shreds and separates municipal solid waste (MSW) to produce refuse derived fuel (RDF), which is then combusted in three boilers. Electricity is produced in two condensing steam turbine generators. The facility operates under numerous MassDEP air quality approvals identified in the Final Air Quality Operating Permit (Application No. 4V95055) dated February 12, 2004, a Revised Conditional Approval (Application No. 4B08059) dated March 29, 2010, and a Conditional Approval (4P08049) dated August 13, 2010. The Plan Approval was submitted as required by the Notice of Non-Compliance (NON-SE-15-7001) dated January 14, 2015.

On April 11, 2012, the MassDEP approved Plan Approval No. SE-11-041, which allowed the Auxiliary Burner Replacement project. SEMASS submitted a request dated May 29, 2013 for an Administrative Amendment. The Administrative Amendment was to modify the stack emissions testing requirements for the subject burners. Subsequently, MassDEP issued Administrative Amendment No. SE-13-026 dated June 28, 2013, which superseded the Plan Approval No. SE-11-041 dated April 11, 2012.

On March 18, 2015, SEMASS submitted Application No. SE-15-013 in order to address the emission test data errors that affected the Nitrogen Oxides (NO_x), Carbon Monoxide (CO), Sulfur Dioxide (SO₂) and Greenhouse Gases/Carbon Dioxide equivalent (GHG/CO_{2e}) emissions data submitted with the Plan Approval Application No. SE-11-041 dated February 15, 2012. The emissions data were a component of baseline past actual emissions and projected emission notification limits.

The Plan Approval No. SE-11-041 concerned the Auxiliary Burner Replacement Project (the Project) in order to use a cleaner fuel (natural gas) and to realize the associated environmental and economic benefits of combusting natural gas. The existing auxiliary burners utilized only distillate oil. The new auxiliary burners would be able to accommodate both distillate oil and natural gas. Auxiliary fuel needs to be available at all times during operation of the Facility whenever waste characteristics and combustion temperatures dictate its use, mostly during startup and shutdown operations. The three (3) existing Riley Stoker Model No. VRC 10 boilers are each equipped with two (2) new dual fuel auxiliary burners. The boilers are rated at 375,000,000 Btu/hr when burning RDF.

This Project was designated by MassDEP as a complex project and SEMASS and MassDEP entered into an agreement governing this project titled “Complex Project, Alternative Fee and Schedule Agreement, Covanta SEMASS Auxiliary Burner Replacement Project” effective December 21, 2011.

SEMASS submitted “Consolidated Plan Approval Application, SEMASS Auxiliary Burner Replacement Project, Revision 1, Fast Track Project Code TF57” dated February 15, 2012 and a CD-ROM titled “Consolidated Plan Approval Application, Revision-1, SEMASS Auxiliary Burner Replacement Project, February 15, 2012, Appendix D-Modeling Input & Output Files”.

In addition, SEMASS over a March 14, 2012 cover letter submitted supplemental information consisting of “Table 1 SEMASS Auxiliary Burner Replacement Project Emission Summary (March 14, 2012 Revision).” The Consolidated Plan Approval Application as revised included the following permit applications:

- Non-Major Comprehensive Plan Approval (310 CMR 7.02(5));
- MWC Emission Control Plan (310 CMR 7.08(2)); and
- PSD Permit Amendment Request (40 CFR 52.21).

The Application did not request any change to the SEMASS Resource Recovery Facility current emission limits or stack exhaust parameters. In addition, worst case air quality impacts are due to RDF burning versus auxiliary fuel burning thus there would be no increase in ambient air quality impacts due to the Project.

Municipal Waste Combustor (MWC) Emission Control Plan

On March 19, 2012, MassDEP issued a Final Approval of the MWC Emission Control Plan contained in Application No. SE-11-042 submitted under Transmittal No. X241551.

Prevention of Significant Deterioration (PSD)

MassDEP implements and enforces the federal Prevention of Significant Deterioration (PSD) regulations found in 40 CFR 52.21 pursuant to the “Agreement for Delegation of the Federal Prevention of Significant Deterioration (PSD) Program by the United States Environmental Protection Agency, Region 1 to the Massachusetts Department of Environmental Protection” dated April 11, 2011.

SEMASS Partnership operates under a revised PSD permit (MassDEP Permit No. 4I87182) issued by MassDEP on June 21, 1990. This is a revision of the PSD permit (MassDEP Permit No. SM84-108-IN) issued by MassDEP on September 30, 1985, pursuant to the federal PSD regulations at 40 CFR 52.21.

The SEMASS Application No. SE-11-041 indicated that installation and operation of the new auxiliary burners would not result in a significant emission increase and, therefore, was not a major modification subject to PSD review.¹ According to federal PSD regulations at 40 CFR 52.21, an emission increase resulting from a physical or operational change is defined by calculating the difference between the “baseline actual emissions” and “projected actual emissions.”² “Baseline Actual Emissions” for an existing emission unit, other than an electric utility steam generating unit, means “the average rate, in tons per year, at which the emission unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding the change.”³ “Projected actual emissions” means “the maximum annual rate, in tons per year, at which an existing emission unit

¹ 40 CFR 52.21(b)(2)(i), (b)(40)

² 40 CFR 52.21(b)(41), (48)

³ 40 CFR 52.21(b)(48)(ii)

is projected to emit a regulated NSR pollutant in any one of the 5 years (12 month period) following the date the unit resumes regular operation after the project....”⁴ In determining the projected actual emissions, the owner or operator of the source must consider all relevant information, including but not limited to historical operational data, the company’s expected business activity, and the company’s highest projections of business activity.⁵

SEMASS boilers are the emission units subject to the PSD applicability test, and the determination of whether the Project would result in a significant emission increase from the firing of all fuels (No. 2 fuel oil, natural gas and RDF). SEMASS provided historical baseline actual emissions and projected actual emissions data and SEMASS determined that the auxiliary burner replacement project would not result in any emission increases that exceeded the PSD program significant emission increase thresholds.⁶ On an actual emission accounting basis, natural gas emissions will be less than No. 2 fuel oil emissions and the auxiliary fuel burning emissions are a small fraction of the overall boiler emissions, which are primarily driven by RDF burning emissions. Based upon the information provided, MassDEP believed that it was reasonable to accept SEMASS’s analysis that the auxiliary burner replacement project would not result in any emission increases that exceeded the PSD significant emission increase thresholds.

In Plan Approval Application No. SE-15-013 SEMASS has affirmed that the corrections to the emission data do not affect the status of the facility with respect to Prevention of Significant Deterioration (PSD) and Non-attainment New Source Review (NNSR) regulations, or the modification to the Facility’s Emission Control Plan (ECP) contained in Approval No. SE-11-042 dated March 19, 2012. The table below contains emissions summary with the corrected emissions data for NO_x, CO, SO₂ and GHG CO_{2e}.

SEMASS AUXILIARY BURNER REPLACEMENT PROJECT EMISSION SUMMARY								
Emissions TPY (Units 1, 2 & 3)	PM2.5 PM10	SO ₂	NO _x	CO	VOC	Pb	PM	GHG (CO _{2e})
2010 Actual (RDF & Oil)	11.1	405	1,413	459	25.9	0.04	11.1	1,485,309
2009 Actual (RDF & Oil)	24.2	443	1,201	466	42.1	0.06	24.2	1,421,527

⁴ 40 CFR 52.21(b)(41)(i)

⁵ 40 CFR 52.21(b)(41)(ii)(a)

⁶ 40 CFR 52.21(b)(23)

SEMASS AUXILIARY BURNER REPLACEMENT PROJECT EMISSION SUMMARY								
(continued)								
Emissions TPY (Units 1, 2 & 3)	PM2.5 PM10	SO ₂	NO _x	CO	VOC	Pb	PM	GHG (CO _{2e})
Two Year Baseline Actual	17.6	424	1,307	462	34.0	0.05	17.6	1,453,418
Significance Threshold ⁽¹⁾	10	40	25	100	25	0.60	25	75,000
95% of Significance Threshold	9.5	38	24	95	23.8	0.57	23.8	71,250
Future Actual (RDF, NG & Oil) ⁽²⁾	27.1	462	1,331	557	57.7	0.62	41.4	1,524,668

Table Key:

NO _x	= Nitrogen Oxides
CO	= Carbon Monoxide
SO ₂	= Sulfur Dioxide
PM	= Particulate Matter
PM ₁₀	= Particulate Matter less than or equal to 10 microns in diameter
PM _{2.5}	= Particulate Matter less than or equal to 2.5 microns in diameter
Pb	= Lead
VOC	= Volatile Organic Compounds
GHG	= Greenhouse Gases
CO _{2e}	= Carbon Dioxide equivalent
O ₂	= Oxygen
TPY	= Tons per consecutive 12-month period
NG	= Natural Gas
RDF	= Refuse Derived Fuel
%	= Percent

Table Notes:

- (1) Only the most stringent PM2.5 significance level is presented. The PM10 significance level is 15 TPY.
- (2) SEMASS will limit auxiliary fuel usage in the boilers (Unit 1, 2 & 3) so that any emission increases resulting from the auxiliary burner replacement project are less than 95% of their respective significance thresholds, so that the project will not be subject to NSR. Future actual emissions are expected to decrease as a result of the project because the use of lower emitting natural gas fuel in the auxiliary burners will displace fuel oil.

Based on a review of the revised PSD applicability analysis, which includes the revised baseline, the SEMASS Auxiliary Burner Replacement Project is not subject to PSD permitting and is not required to obtain a new or revised PSD permit to allow the non-major modifications described above to proceed.

Table 4 and 5 contains record keeping and reporting requirements that are applicable regardless of this PSD finding.

310 CMR 7.00 Appendix A: Emission Offsets and Nonattainment Review

310 CMR 7.00: Appendix A applies if the proposed changes in NO_x or VOC emissions exceed the “significant” increase thresholds. A significant increase is determined by the evaluation of the “net emissions increase” as defined in Appendix A. Net emissions increases are based on the differential of “actual emissions” as defined in 310 CMR 7.00 Appendix A(2) Definitions. SEMASS NO_x and VOC past actual to projected actual emissions and assumptions are contained in the table above titled “SEMASS Auxiliary Burner Replacement Project Emission Summary.”

As those regulations pertain to: the construction and operation of new auxiliary burners, MassDEP has determined that “actual emissions” equal the “representative actual annual emissions” of the unit, provided the source owner or operator maintains and submits to the Department, on an annual basis for a period of five years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in a “significant net emissions increase” of NO_x or VOC emissions. SEMASS will maintain adequate records and submit the necessary documentation to MassDEP to demonstrate that the construction and operation of the new auxiliary burners did not result in a “significant net emission increase” in NO_x or VOC emissions and therefore will not constitute a “major modification”. Table 4 and 5 contain the specifics for these record keeping and reporting requirements.

SEMASS RRF Units 1, 2 and 3 Auxiliary Burner Replacement Project, based on current information and pursuant to 310 CMR 7.00 Appendix A(2), was not considered a “major modification” to an existing major source. Based on current information, LAER and Offsets, pursuant to 310 CMR 7.00 Appendix A, were not required for the alterations/construction.

Best Available Control Technology

Emission limits for the Project are contained in Table 2. The Applicant was not required to provide an assessment of Best Available Control Technology (BACT) per 310 CMR 7.02(8)(b) since the oil burners were being replaced with the dual fuel, oil and natural gas, burners. There was no increase in emissions, lb/MMBtu or tons per year, due to the new burners.

The Facility is subject to the 40 CFR 60 Subpart Cb “Emission Guidelines” and 310 CMR 7.08(2) “Municipal Waste Combustors”.

2. EMISSION UNIT (EU) IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

Table 1			
EU#	Description	Design Capacity	Pollution Control Device (PCD)
EU1	Riley Stoker Boiler Model VRC 10	Steam: 280,000 lb/hr RDF: 375 MMBtu/hr NG: 340 MMBtu/hr No. 2 FO: 325 MMBtu/hr	Two (2) No. 2 Fuel Oil/Natural Gas Fired Auxiliary Burners [AB]; 162.5 MMBtu/hr per AB firing No. 2 Fuel Oil; 170 MMBtu/hr per AB firing Natural Gas
			Wet Bottom Boiler Seal
			Powdered Activated Carbon Injection System
			Spray Dryer Absorber with Calcium Hydroxide Slurry Atomization
			Five Field, Electrostatic Precipitator
			Low Pressure High Volume Pulse Jet, Fabric Filter Bag, Compact Hybrid Particulate Collector
EU2	Riley Stoker Boiler Model VRC 10	Steam: 280,000 lb/hr RDF: 375 MMBtu/hr NG: 340 MMBtu/hr No. 2 FO: 325 MMBtu/hr	Two (2) No. 2 Fuel Oil/Natural Gas Fired Auxiliary Burners [AB]; 162.5 MMBtu/hr per AB firing No. 2 Fuel Oil; 170 MMBtu/hr per AB firing Natural Gas
			Wet Bottom Boiler Seal
			Powdered Activated Carbon Injection System
			Spray Dryer Absorber with Calcium Hydroxide Slurry Atomization
			Five Field, Electrostatic Precipitator
			Low Pressure High Volume Pulse Jet, Fabric Filter Bag, Compact Hybrid Particulate Collector.
EU3	Riley Stoker Boiler Model VRC 10	Steam: 280,000 lb/hr RDF: 375 MMBtu/hr NG: 340 MMBtu/hr No. 2 FO: 325 MMBtu/hr	Two (2) No. 2 Fuel Oil/Natural Gas Fired Auxiliary Burners [AB]; 162.5 MMBtu/hr per AB firing No. 2 Fuel Oil; 170 MMBtu/hr per AB firing Natural Gas
			Wet Bottom Boiler Seal
			Selective Non-Catalytic Reduction with Urea Injection
			Spray Dryer Absorber with Calcium Hydroxide Slurry Atomization
			Pulse Jet, 12 Module, Fabric Filter/Baghouse

Table 1 Key:

EU#	= Emission Unit Number	NG	= Natural Gas
PCD	= Pollution Control Device	No. 2 FO	= No. 2 Fuel Oil
RDF	= Refuse Derived Fuel	MMBtu/hr	= Million British Thermal Units per hour

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION AND EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2.

Table 2			
EU#	Operational / Production Limit	Air Contaminant	Emission Limit⁽¹⁾⁽²⁾
EU1 EU2 EU3	1. No. 2 FO: 325 MMBtu/hr	N/A	N/A
	2. NG: 340 MMBtu/hr	N/A	NA
	3. No. 2 FO & NG (total): 328,500 MMBtu/yr	N/A	N/A
	4. N/A	PM	0.03 lb/MMBtu 10.2 lb/hr 4.9 TPY
	5. N/A	PM2.5	0.06 lb/MMBtu 20.4 lb/hr 9.9 TPY
	6. N/A	PM10	0.06 lb/MMBtu 20.4 lb/hr 9.9 TPY
	7. N/A	NO _x	0.20 lb/MMBtu 68.0 lb/hr 32.9 TPY
	8. N/A	CO	0.50 lb/MMBtu 170.0 lb/hr 82.1 TPY
	9. N/A	SO ₂	0.30 lb/MMBtu 102.0 lb/hr 49.3 TPY
	10. N/A	HAP	0.5 lb/hr 0.2 TPY
	11. N/A	HAPs (total)	0.5 lb/hr 0.2 TPY

Table 2 (continued)			
EU#	Operational / Production Limit	Air Contaminant	Emission Limit⁽¹⁾
EU1 EU2 EU3	12. N/A	CO ₂	245 lb/MMBtu 83,300 lb/hr 40,241 TPY
	13. N/A	Opacity ⁽³⁾	≤20%
EU1 EU2	14. N/A	VOC	26 ppmvd @ 12% CO ₂ (dry basis) as methane 0.5 lb/hr 0.2 TPY
EU3	15. N/A	VOC	27 ppmvd @ 7% O ₂ (dry basis) as methane 0.5 lb/hr 0.2 TPY

Table 2 Key:

EU#	= Emission Unit Number
NO _x	= Nitrogen Oxides
CO	= Carbon Monoxide
SO ₂	= Sulfur Dioxide
PM	= Total Particulate Matter
PM ₁₀	= Particulate Matter less than or equal to 10 microns in diameter
PM _{2.5}	= Particulate Matter less than or equal to 2.5 microns in diameter
VOC	= Volatile Organic Compounds
HAP (single)	= Maximum single Hazardous Air Pollutant
HAPs (total)	= Total Hazardous Air Pollutants.
CO ₂	= Carbon Dioxide
O ₂	= Oxygen
TPY	= Tons per consecutive 12-month period
NG	= Natural Gas
No. 2 FO	= No. 2 Fuel Oil
lb/hr	= Pound per Hour
lb/MMBtu	= Pound per Million British Thermal Units
MMBtu/hr	= Million British Thermal Units per hour
MMBtu/yr	= Million British Thermal Units per consecutive 12-month period
N/A	= Not Applicable
%	= Percent
ppmvd	= parts per million volume dry

Table 2 Notes:

- (1) In accordance with 310 CMR 7.02(8)(b) assessment of BACT is not required.
- (2) Emission limits applicable during periods of no RDF burning
- (3) Exclusive of uncombined water vapor

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5:

Table 3	
EU#	Monitoring and Testing Requirements
Facility-wide	1. The Permittee shall continuously monitor No. 2 FO flow rate.
	2. The Permittee shall continuously monitor NG flow rate.
	3. Within 60 days from the date that the new auxiliary burners achieve maximum firing rate of No. 2 FO but not longer than 180 days from the date of initial No. 2 FO burning: complete stack emission testing to document compliance with PM, PM _{2.5} , PM ₁₀ , NO _x and CO lb/MMBtu and lb/hr emission limits. This stack emissions testing shall be completed for one boiler which uses two auxiliary burners. The testing shall be conducted at no less than 30 percent on the burner's maximum rated capacity. The 30 percent of rated capacity is for testing purposes only and will not be considered a restriction on operations.
	4. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	5. If and when MassDEP requires it, the Permittee shall conduct emission testing, in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13.

Table 3 Key:

EU#	= Emission Unit Number
lb/hr	= Pound per Hour
lb/MMBtu	= Pound per Million British Thermal Units
PM	= Total Particulate Matter
PM ₁₀	= Particulate Matter less than or equal to 10 microns in diameter
PM _{2.5}	= Particulate Matter less than or equal to 2.5 microns in diameter
NO _x	= Nitrogen Oxide
CO	= Carbon Monoxide
NG	= Natural Gas
No. 2 FO	= No. 2 Fuel Oil

Table 4	
EU#	Record Keeping Requirements
EU1	1. The Permittee shall record on a monthly basis the MMBtu of No. 2 FO burned.
EU2	2. The Permittee shall record on a monthly basis the Gallons of No. 2 FO burned.
EU3	

Table 4 (continued)	
EU#	Record Keeping Requirements
EU1 EU2 EU3	3. The Permittee shall record on a monthly basis the MMBtu of natural gas burned.
	4. The Permittee shall record on a monthly basis the Cubic feet of natural gas burned.
	5. The Permittee shall record on a monthly basis the MMBtu of No. 2 FO and natural gas (in total) burned
	6. The Permittee shall record the MMBtu per consecutive 12-month period of No. 2 FO and natural gas burned.
	7. The Permittee shall in accordance with 40 CFR 52.21(r)(6)(iii) and 310 CMR 7.02(3)(c) maintain a record of the annual New Source Review emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of operations with the new auxiliary burners.
Facility-wide	8. The Permittee shall maintain adequate records on-site to demonstrate compliance with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve month period (current month plus prior eleven months). These records shall be compiled no later than the 15 th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at http://www.mass.gov/eea/agencies/massdep/air/approvals/limited-emissions-record-keeping-and-reporting.html#WorkbookforReportingOn-SiteRecordKeeping .
	9. The Permittee shall maintain records of monitoring and testing as required by Table 3.
	10. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU(s) approved herein on-site.
	11. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), PCD(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.
	12. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.
	13. The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	14. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.
	15. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.

Table 4 Key:

EU# = Emission Unit Number
PCD = Pollution Control Device
SOMP = Standard Operating and Maintenance Procedure
USEPA = United States Environmental Protection Agency
NG = Natural Gas
No. 2 FO = No. 2 Fuel Oil
MMBtu = Million British Thermal Units

Table 5	
EU#	Reporting Requirements
EU1 EU2 EU3	1. Within 30 days following the calendar quarter, the Permittee shall report to MassDEP the MMBtu of No. 2 FO burned in each month during the calendar quarter.
	2. Within 30 days following the calendar quarter, the Permittee shall report to MassDEP the MMBtu of No. 2 FO burned per consecutive 12-month period.
	3. Within 30 days following the calendar quarter, the Permittee shall report to MassDEP the MMBtu of NG burned in each month during the calendar quarter.
	4. Within 30 days following the calendar quarter, the Permittee shall report to MassDEP the MMBtu of NG burned per consecutive 12-month period
	5. Within 30 days following the calendar quarter, the Permittee shall report to MassDEP the MMBtu of No. 2 FO and NG burned in month during the calendar quarter.
	6. Within 30 days following the calendar quarter, the Permittee shall report to MassDEP the MMBtu of No. 2 FO and NG burned per consecutive 12-month period.
	7. Within 5 days following the new auxiliary burners initial burning of No. 2 FO, the Permittee shall report to MassDEP the date that No. 2 FO burning commenced.
	8. Within 5 days following the new auxiliary burners initial burning of NG, the Permittee shall report to MassDEP the date that NG burning commenced.
	9. Within 60 days after the end of each calendar year for a period of five (5) years following resumption of operations with the new auxiliary burners: the Permittee shall submit a report to MassDEP if the annual emissions, in tons per year, from the project exceed the baseline actual emissions, as documented in this Plan Approval Section 1 Description of Facility and Application, by a significant amount (as defined in 40 CFR 52.21(b)(23) for that regulated pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to 40 CFR 52.21(r)(6)(i)(c).
	10. Within 60 days after the end of each calendar year for a period of five (5) years following resumption of operations with the new auxiliary burners: the Permittee shall submit a report to MassDEP if the NOx or VOC annual emissions, in tons per year, from the project exceed the baseline actual emissions, as documented in the Plan Approval Section 1 Description of Facility and Application, by a significant amount (as defined in 310 CMR 7.00 Appendix A(2)) for that regulated pollutant, and if such emissions differ from the preconstruction projection as documented in this Plan Approval Section 1 Description of Facility and Application.

Table 5 (continued)	
EU#	Reporting Requirements
Facility-wide	11. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a “Responsible Official” as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).
	12. The Permittee shall notify the Southeast Regional Office of MassDEP, BAW Compliance & Enforcement Permit Chief by telephone at (508) 946-2817, email at sero.air@state.ma.us or fax (508) 946-2865 as soon as possible, but no later than three (3) business days after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to the Compliance & Enforcement Permit Chief at MassDEP within ten (10) business days after discovery and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
	13. The Permittee shall report annually to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2)(e), 7.03, 7.26, etc.), which did not require Plan Approval.
	14. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30-days from MassDEP’s request.
	15. The Permittee shall submit to MassDEP for approval a stack emission pretest protocol, at least 30 days prior to emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.
	16. The Permittee shall submit to MassDEP a final stack emission test results report, within 45 days after emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.

Table 5 Key:

EU# = Emission Unit Number
NG = Natural Gas
No. 2 FO = No. 2 Fuel Oil
MMBtu = Million British Thermal Units

4. SPECIAL TERMS AND CONDITIONS

- A. The Permittee is subject to, and shall comply with the Special Terms and Conditions as contained in Table 6.

Table 6	
EU#	Special Terms and Conditions
EU1, EU2, EU3	1. Heat input of No. 2 FO and NG, in total, annual heat input capacity factor shall not exceed 10%.
	2. The Permittee submitted to MassDEP a timely Operating Permit (OP) Renewal application that is pending MassDEP action. The OP Renewal application should be revised, in lieu of submitting an OP Minor Modification application to reflect this Plan Approval and any other applicable requirement that the Facility is subject to. A revised OP Renewal Application shall be submitted to MassDEP within 60 days of the date of this Plan Approval.
Facility-Wide	<p>3. This Plan Approval, Transmittal No. X265002, supersedes the following Approvals:</p> <ul style="list-style-type: none"> a. Administrative Amendment SE-13-26, transmittal No. X239676, dated June 28, 2013 b. Plan Approval SE-11-041, transmittal No. X239676, dated April 11, 2012 <p>The listed Approval Letters shall be deemed null and void. The underlying applications for the Plan Approvals herein shall remain valid.</p>

Table 6 Key:

EU# = Emission Unit Number
NG = Natural Gas
No. 2 FO = No. 2 Fuel Oil
% = Percent

- B. The Permittee shall install and use an exhaust stack on each of the Emission Units listed in Table 7 that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as “shanty caps” and “egg beaters.”

- C. The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7, for the Emission Units that are regulated by this Plan Approval:

Table 7				
EU#	Stack Height Above Ground (feet)	Stack Inside Exit Dimensions (feet)	Stack Gas Exit Velocity Range (feet per second)	Stack Gas Exit Temperature Range (°F)
EU1	345	7.5	90-120	280-340
EU2	345	7.5	90-120	280-340
EU3	345	7.5	90-120	280-340

Table 7 Key:

EU# = Emission Unit Number
°F = Degree Fahrenheit

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.

- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.
- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. The Permittee shall conduct emission testing, if requested by MassDEP, in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13. If required, a pretest protocol report shall be submitted to MassDEP at least 30 days prior to emission testing and the final test results report shall be submitted within 45 days after emission testing.
- K. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

SEMASS in a letter to the Executive Office of Energy & Environmental Affairs dated October 26, 2011 provided a description of the Auxiliary Burner Replacement Project, including a comparison to the Massachusetts Environmental Policy Act (MEPA) review thresholds, and requested an advisory opinion in accordance with 301 CMR 11.01(6)(a). The Secretary of Energy & Environmental Affairs, in a letter dated November 8, 2011, determined that the Auxiliary Burner Replacement Project, based upon information provided, was not subject to review under MEPA and the submission of an Environmental Notification Form (ENF) was not required.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Should you have any questions concerning this Plan Approval, please contact Elza Bystrom by telephone at (508) 946-2856, or in writing at the letterhead address.

Sincerely,

*This final document copy is being provided to you electronically by the
Department of Environmental Protection. A signed copy of this document
is on file at the DEP office listed on the letterhead.*

Thomas Cushing
Permit Chief
Bureau of Air and Waste

ecc: Rochester Board of Health
Rochester Fire Department
William Campbell, SEMASS Partnership
Michael Feinblatt, ESS Group, Inc.
MassDEP/Boston – Yi Tian
MassDEP/SERO – Maria Pinaud, Peter Russell